4. BURN INJURIES AND TREATMENT

Lesson Topic: Burn Injuries and Treatment

Instructional Reference:

1. NAVEDTRA 10669-C

2. FM 21-11

Terminal Objectives:

1. To instruct Marines to Identify the classifications, types, symptoms and treatment of burns.

Enabling Objectives: At the end of this period of instruction, the students will be able to:

1. Identify the three classifications of burns.

2. Identify four types of burns.

3. Know the symptoms and treatment for burns.

I. THREE CLASSIFICATIONS OF BURNS

A. FIRST DEGREE BURN - The skin is sensitive to touch and blanches with pressure, it is reddened, and tingling. Pain is mild to severe, edema is minimal. Healing usually occurs naturally within a week.

B. SECOND DEGREE BURN - It is characterized by epidermal blisters, mottled appearance, and a red base. Damage extends into but through, the dermis. Recovery usually takes 2 to 3 weeks, with some scarring and depigmentation. This condition is painful. Body fluids may be drawn into the injured tissue, causing edema and possible a "weeping" fluid (plasma) loss at the surface.

C. THIRD DEGREE BURN - It is a full thickness injury penetrating into muscle and fatty connective tissues or even down to the bone. Tissues and nerves are destroyed. Shock with blood in the urine is likely to be present. Pain will be absent at the burn site if all the area nerve endings are destroyed. Tissue color will range from white (scalds) to black (charring burns), significant amount of fluids will be lost by plasma "weeping" or by hemorrhage, thus reducing circulation volume.

D. Other factors in burn evaluation are the location of the burn and presence of any other complication.

II. TYPES OF BURNS

A. THERMAL BURNS: Caused by contact with fire, hot objects, hot liquids or gases, fire ball from a nuclear blast.

B. ELECTRICAL BURNS: Caused by contact with electrical wires, current or lighting.

C. CHEMICAL BURNS: Caused by contact with wet/dry chemicals, white phosphorus from marking rounds, grenades, battery acids, etc.

D. LASER BURNS: Caused by high intensity light beam.

III. FIRST AID MEASURES

A. The primary objective in the treatment of burns is to prevent or lessen shock and infection. Burns often cause extreme pain, scarring and can cause death. Proper treatment will minimize further injury to the burned area.

B. After the victim has been removed from source of the injury, first aid should be kept to a minimum.

1. Maintain an open airway.

2. Control hemorrhage, and treat for shock.

3. Remove constricting jewelry and articles of clothing.

C. Protect the burn area from contamination by covering it with clean sheets or dry dressing DO NOT remove clothing adhering to a wound.

D. Take the following precautions:

1. Do not place dressing over the genital area.

2. Do not break blisters.

3. Do not apply greases or ointments to burns.

4. Electrical burns usually leave both entry and exit wound from the passage of electricity through the body. Exit burns may appear on any area of the body despite location of the entry burn.

5. If the burn is caused by wet or dry chemicals, flush burn with water or any drinkable fluid and cover with a dry dressing.

6. If the burn is caused by white phosphorus (WP), flush the area with water then cover with a wet dressing or mud to exclude the air and keep the WP particles from burning.

a. If the casualty is nauseated, give him small amounts of water.

b. Treat for shock and evacuate as soon as possible.

IV. REVIEW

A. The instructor shall ask the students if they have questions. Questions should also be allowed during the lecture to clarify any misunderstandings.

B. If the students do not have any questions, then the instructor shall ask students questions to ensure the lesson was understood.